Technical Report Documentation Page

1. Report No.	2. Government Accession Number	3. Recipient's Catalog No.
CG-D-22-98	AD-A 355927	

4. Title and Subtitle
Establishment of International Standards Organization (ISO) 5660 Acceptance Criteria for Fire Restricting Materials Used on High Speed Craft

5. Report Date
September 1998

6. Performing Organization Code
Project No. 3308.2.77

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8. Performing Organization Report No.
R&DC 13/98 / UDI 97

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10. Work Unit No. (TRAIS)

11. Contract or Grant No.
DTCG23-98-F-E00312

12. Sponsoring Organization Name and Address
U.S. Department of Transportation
United States Coast Guard
Marine Safety and Environmental Protection (G-M)
Washington, DC 20593-0001

13. Type of Report & Period Covered
Final Report

14. Sponsoring Agency Code
Commandant (G-MSE)
U.S. Coast Guard Headquarters
Washington, DC 20593-0001

15. Supplementary Notes
The U.S. Coast Guard technical point of contact and COTR is Mr. Louis Nash of the U.S. Coast Guard Research and Development Center. The Headquarters' Project Officer is LT Andrew Grenier of the Directorate of Marine Safety and Environmental Protection. This report compliments report, "Fire Smoke and Toxicity of Composites on High Speed Craft."

16. Abstract (MAXIMUM 200 WORDS)

The U.S. Coast Guard is seeking to develop Cone calorimeter acceptance criteria to qualify linings, combustible components of furniture and other contents as fire restricting materials for high speed craft. In support, a research program was conducted at Southwest Research Institute between August 1997 and July 1998 to develop data for comparing the results of various fire tests. Eight composite materials and one textile wall covering were tested in the International Standards Organization (ISO) 9705 room. The same materials were also evaluated in small scale according to the test procedures of the Cone calorimeter, the International Maritime Organization (IMO) surface flammability test, and the IMO smoke and toxicity test. The ISO 9705 room tests and some of the Cone calorimeter experiments were supplemented with toxic gas analysis using Fourier Transform InfraRed (FTIR) spectroscopy. Some of the composite materials were used as framing materials for mock-up chairs and luggage racks for additional tests. This report covers the room tests, ISO 5660 Cone calorimeter tests, IMO surface flammability tests, and Lateral Ignition Flame Spread Test (LIFT) tests.

17. Key Words	18. Distribution Statement
advanced composites, cone calorimeter, fire restricting materials, high speed craft, maritime fire safety, room fire modeling, room fire tests	This document is available to the U.S. public through the National Technical Information Service, Springfield, VA 22161

19. Security Class (This Report)	20. Security Class (This Page)	21. No of Pages	22. Price
UNCLASSIFIED	UNCLASSIFIED		